

**AMENDMENT TO THE ABSTRACT:**

Please replace the abstract with the following:

-- Provided are a catalyst for hydrocarbon steam cracking for light olefin production and a method for preparing the same. The catalyst is a simple  $\text{KMgPO}_4$  catalyst, a supported  $\text{KMgPO}_4$  catalyst, or a  $\text{KMgPO}_4$ -sintered catalyst. The supported  $\text{KMgPO}_4$  catalyst is prepared by impregnating a carrier with an aqueous solution of a  $\text{KMgPO}_4$  precursor and the  $\text{KMgPO}_4$ -sintered catalyst is prepared by mixing a  $\text{KMgPO}_4$  powder or a  $\text{KMgPO}_4$  precursor powder with metal oxide followed by sintering. Provided is also a method for producing light olefins such as ethylene and propylene by steam cracking in the presence of the catalyst. When the catalyst comprising  $\text{KMgSO}_4$  as a catalytic component is used in olefin production, the yield of olefins is increased and the amount of cokes deposited on the catalyst is reduced.-

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